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CONSOLIDATORS AND SURVIVORS: FORMAL SELF HELP AND SELF-HELP HOMEBUILDERS IN SOUTH AFRICA.

Timothy Hart

PREFACE

This paper is an edited and abridged version of a draft manuscript presently being prepared by Timothy Hart and Graeme Hardie of the National Institute for Personnel Research and is ciculated among participants in the African Studies seminar series for comment. Both documents are based on research conducted in formal self-help residenial areas in various parts of South Africa. This research is part ofan NIPR project, the broad objective of which is to examine development in low income communities. In the case of self help, the emphasis is on assessing the socio-economic and psychological impact of particalar housing strategies on the users themselves. This theme is central to the present paper.

INTRODUCTION

It is widely acknowledged that self-help procedures produce housing (Harms, 1982), but there are differing perspectives on the contexts and motives leading to the emergence of the self-help housing phenomenon, and the significance of self-help housing action in the lives of the actors themselves (Martin, 1984). The first issue has been the focus of sustained debate elsewhere (Burgess, 1978; 1982; Harms, 1976; 1982; Lea, 1979; Turner, 1978; 1982), but the second has remained largely the domain of the supporters of self-help housing strategies. This discussion is a first attempt at focussing critical scrutiny on the the impact of self-help housing among those who are most intimately involved in it, the self-help homebuilders. This is not a clear-cut task, because the existing self-help liTerature provides few leads. The bulk of critical work focussing on self-help is a response to the glowing descriptions of self-help enterprise that emerged from the pens of fieldworkers in the squatter settlements of Latin America (Burgess, 1978). Most of this criticism places the self-help squatter phenomenon within a class-based framework of domination and subjection. Here, the group is the unit of analysis, and self-help action is seen to be the collective response to structural poverty. We find this analysis useful, but somewhat unsatisfactory in the context of our own research. Firstly, having worked among self-help homebuilders, it is apparent to us that self help means different thing to different people. Whatever the overarching principle behind the emergence of self help, it is clear that every self-help scheme incorporates winners and losers, opportunists and unwilling co-optees, developers and survivors (Martin, 1984). Secondly, self-help housing and squatting are by no means synonymous in South Africa. Around South African cities, controlled, state-sanctioned self-help has emerged in the wake of ailing mass housing schemes. Self-helpers in this situation are not squatters, but may be relocatees, refugees from chronic overcrowding elsewhere, or even speculators keen to grab new residential possibilities. All enter the self-help arena with different chances of making out, some determined by entry, and others by contextual and

personal factors beyond this.

The terms "self help" and "self-help housing" defy value-free definition (Burgess, 1978, p.1106; Burgess, 1982, p.93; Burns and Grebler, 1977, pp.15-18;Connolly, 1982, p.171, Turner, 1982, pp.99-100). In current common usage self help housing refers to a process where individuals and groups among those to be housed have the task of planning, organising and implementing activities leading to the provision and maintenance of houses and residential infrastructure (Ward, 1982). Self help housing, in these terms, is seen to imply the mobilization and self management of various resources vested in individuals and groups. These resources are consumed during the self-help process, and may include time, personal savings and individual and co-operative labour. As popularly understood, self help housing does not exclude the use of paid labour, provided that hired contractors are organised and managed by the self-help builders (Burgess, 1978; Jorgensen, 1977).
Since self-help is clearly a loaded concept, it is perhaps better to examine the interaction between self-help and self-help homebuilders in terms of the self-help action itself. A term often used to describe the results of self help activity is consolidation (Ward, 1976). In a purely physical sense, consolidation implies a process of change in the built environment; the direct, tangible outcome of the self-help housing process. With physical consolidation as a starting point it is possible to examine various scenarios with regard to the participants themselves. One scenario is that of development. Among an influential group of social scientists who have worked mainly in Latin America among squatters, physical consolidation is argued to be accompanied by development. It is difficult to synthesize the arguments presented by this group, being as diverse as they are. In very broad terms,however, physical consolidation in squatter settlements is seen to take place in a piecemeal but generally incremental way, as community and individual resources become available for investment in housing (Ward, 1976). This physical process, in turn, is argued to support and reflect social consolidation, (Turner, 1968), in terms of which self help homebuilders gain confidence and competence, and win progressive social and economic advantage in the urban area (Turner, 1968; 1972). From this standpoint, consolidation is two-pronged, encapsulating the physical upgrading of residential areas, and the socio-economic and psychological upliftment of the self-help participants. It is in this broad context that JFC Turner speaks of "progressive development" among consolidating squatters in Latin American cities (Turner, 1967, p.177; 1968, p.357).

Consolidation-as-development is one perspective from which to evaluate the modes and outcomes of self-help housing activity in SouthAfrica, but there is little doubt that formal, controlled self-help will not satisfy the conditions seen by Latin American workers to underly the development potential of self-help consolidation. Partly as a result of this somewhat artificial transfer of a particular model to a new and different setting, and also in response to the ideological nature

of the consolidation-as-development viewpoint, it is necessary to adopt an opposing argument. This position draws on the work of the small but vocal body of self-help critics, and it proposes that for self-help homebuilders in South Africa, consolidation is little more than a strategy for survival. Consolidation-as-development, and consolidation-as-survival are thus the crude lenses through which the impact of formal self-help on participating homebuilders is examined.

A very specific group of self-help homebuilders are examined in this chapter. They are the residents of state-sanctioned formal site-and-service schemes designed to house urban Africans. One of these schemes, Mangaung (Bloemfontein, Orange Free State), was established before the turn of the century, and predates the current wave of self-help advocacy. The other two, Constantia and Inanda Newtown (Kroonstad, Orange Free State and Durban, Natal) were initiated after 1976 (Figure 1). Although by no means representative of the entire spectrum of self-help housing in South Africa, these three formal schemes are significant for two particular reasons. Firstly, the concept and practice of controlled self help housing have recently gained widespread state and private sector endorsement, and self help has, during this period, been gradually woven into what has been called a "new dispensation" for urban Africans (Lea, 1980, pp.9-14). Secondly, it is believed that the self-help strategies extant during the present period of "twilight of purpose" (to borrow a phrase from Hellman, 1949) in African housing will underpin self-help policy under the new dispensation. With the withdrawal of the state from mass housing projects, it is likely that increasing numbers of African people will find themselves participants in formal self-help. The circumstances of establishment and the evolutionary path of existing self-help projects may well presage the residential future of millions of self-help homebuilders. It seems folly to allow the precipitate implementation of particular self-help housing strategies to run ahead ofthe lessons to be learned by sober evaluation of existing self-help experience. To this end, this chapter is based on research conducted among self-help homebuilders themselves (Appendix), and it is their individual and collective circumstances that are reflected in the following pages.

URBAN SELF HELP IN SOUTH AFRICA.

The physical manifestation of self-help housing in South Africa may be divided into at least four overlapping categories. They are:

1. Rural (or vernacular) self-help: Indigenous self help practiced mainly, but certainly not exclusively in rural areas (Frescura 1981; Haarhoff, 1979; Schoeman, 1980).

2. Urban squatting: Illegal self-help settlement around urban areas outside the homelands.

3. Urban formal self help: State-sanctioned controlled self help settlement around urban areas outside the homelands.

4. Homeland self-help: This is a complex category incorporating resettlement camps (Mare, 1980), pre-homeland site-and-service schemes (Hart and Hardie, 1983), rural indigenous self help and border informal settlement.

The second category is of central concern here, but not exclusively so. Formal urban self-help and urban squatting are historically linked at opposite ends of a African housing see-saw, reflecting periodic crises in housing, and predictable reactionary measures on the part of the state. Homeland self help is often simply the export version of urban squatting, but state housing agencies have recently begun replicating formal urban self-help systems in the homelands, mainly to house relocatees (Hart, 1983). Vernacular architecture is often a feature of informal urban settlement (Haarhoff, 1979), and has frequently been accepted as a component of low-cost, "appropriate technology" formal schemes (Glyn, 1982).

The evolution of Mangaung, Bloemfontein, incorporates the time of crystallisation of segregationist policies regarding urban African settlement before and around the introduction of the Natives (Urban Areas) Act. In a fluid and heterogeneous housing policy environment, the city fathers of Bloemfontein demonstrated remarkable strength and continuity of purpose, building perhaps on earlier Republican efforts to secure white baaskap and the separation of the races (Van Aswegen, 1970). Before the turn of the century, Bloemfontein had introduced a pass system to control influx and had begun to enforce basic housing standards in some African settlements (Schoeman, 1980; Smit and Booysen, 1981; Van Aswegen, 1970). While some cautious local authorities dallied in weighing the ramifications of the Urban Areas Act, Bloemfontein formally instituted an assisted site-and-service scheme known as the "Bloemfontein System" (Hellman, 1949, p.235). This system perpetuated earlier policies in the Orange Free State, and presaged future self-help in several ways. For example, many of those housed in terms of the Bloemfontein Scheme were relocatees from the condemned township of Waaihoek and Bethanie, and self-help thus served to replace existing housing rather than to provide new housing (Schoeman, 1980). In addition, the Bloemfontein system further foreshadowed modern South African self help by linking participation in the scheme to residence qualifications and minimum housing standards (Hellman, 1949; Smit and Booysen, 1980; Morris, 1981). From the mid-twenties onwards, when popular involvement in African housing was being threatened throughout South Africa, the Bloemfontein system perpetuated a remarkable pocket of self-help housing activity.

The shift in emphasis toward mass public housing did not entirely eliminate African owner-building in urban areas, because most of the formal housing programmes were hopelessly inadequate in the face of housing demand. During the Second World War, influx control was

relaxed to service the war economy, and migrants moved to urban areas in large numbers from impoverished peripheral reserves (Morris, 1981). The post-war period was one during which self-help housing once again flourished among urban Africans, albeit frequently in the form of backyard shacks and illegal squatting. The state reaction to squatting was generally negative, the self-help actions of the squatters being construed as an affront to authority and a potential health hazard. Local government responses to squatting and illegal sub-tenancy varied, ranging between the extremes of neglect and forced eviction. Emergency camps were established in some areas to receive the relocatees, and these became, in essence, formal self-help schemes (Morris, 1981).

The Nationalist government, after it had gained power in 1948, reaffirmed and refined the stuctures designed to control African urbanization and residential development. Under the umbrella of separate development, these controls were to include stricter racial segregation and tighter influx control. The rights of urban Africans were to reflect their status as "temporary sojourners" in urban areas (Morris, 1981). In the face of the inherited African housing backlog, exacerbated by population removals backed by new segregationist legislation, the Nationalists were forced to consider alternatives to mass public housing.

One of these alternatives was that of site-and-service, and this expedient was adopted cautiously as an adjunct to state housing schemes. A 30 year leasehold scheme was introduced, but this ran parallel to continued draconian measures to eliminate pockets of African freehold in the inner cities (Morris, 1981). In official site-and-service schemes self-help activities were often limited to the erection of temporary shacks, these serving as interim shelters for those awaiting a more permanent house to be provided by local state agencies (Morris, 1981). Johannesburg followed the formula of linking site-and-service and mass housing closely, and between 1954 and 1960 made 33000 sites available in various parts of what was to become greater Soweto (Morris, 1981).

Formal site-and-service on a grand scale was dealt a severe blow when the granting of new 30 year leases was stopped in 1968. In fact, both mass housing and the associated site-and-service self help suffered in the wake of new efforts by the state to enforce separate development. The winding down of state-sponsored housing provision produced a resurgence in African self-help housing activity, within and around the formal townships, and en masse in homeland areas close to metropolitan areas. The response of municipalities and later Administration Boards to this burgeoning self help thrust was mixed, but many local authorities chose to ignore backyard shacks, and some even sanctioned new self-help schemes to alleviate critical housing shortages generated by population growth, relocation and an ever-dwindling formal housing supply. Some of these obscure

self-help initiatives were later to emerge as forerunners in a new generation of formal self-help settlements.

In the context of a much publicised and ever increasing shortfall in the provision of state housing (Dewar and Ellis, 1979; Maasdorp, 1980; Schlemmer and Moller, 1982; Swart, 1981), the private sector and sections of the academic community have recently spearheaded a drive toward the acceptance of housing strategies for urban Africans other than those based on the direct intervention of the state (Maasdorp, 1977; Rupert, 1976¾. Spurred perhaps by the sense of crisis engendered by the 1976 riots in African urban areas, and fuelled by recurrent confrontations between representatives of the state and squatters (Lea, 1980; Wilkinson, 1981), the question of an alternative housing policy for urban blacks has been debated with ever increasing urgency (Hart and Hardie, 1983).

In the midst of this debate, a growing advocacy of various forms of self help has emerged, and private sector organisations such as the Urban Foundation çUF) have taken the initiative in establishing demonstration schemes designed to promote self-help among financial organisations and local governments (Lea, 1980). Faced with this pressure, and despite the deep malaise of its public housing system, state acceptance of self-help has not been spontaneous, nor is the recently confirmed official approval (De Villiers, 1981) of self-help housing unqualified. As a forerunner to the present official status of self-help, leasehold tenure was reintroduced in 1976 (Morris, 1981). Following the reports of the Riekert Commission and the Viljoen Committee (De Villiers, 1981), the state also approved the involvement of private developers and employers, and declared itself willing to adopt the role of a supplier of serviced land (De Villiers, 1981). A rash of squatter removals between 1976 and 1982 (Surplus People Project, 1983) demonstrated quite clearly, however, that self-help housing in urban areas outside the homelands was to be permitted only in approved areas, and only among those qualified for non-homeland residence. The structure of centralised control over African housing established by the Nationalist Government has remained intact, despite efforts to gain support for community councils from 1977 onwards. In the post-Soweto 1976 period, the Bantu Administration Boards (later to be called "Development Boards) have been the overseers of formal self-help housing outside the homelands(Hart, 1983).

In the midst of the groundswell of support for self-help housing, and despite a lack of official support for self-help, a new generation of formal self-help schemes has emerged throughout non-homeland South Africa. Beneath the pervasive overlay of state control, a remarkable diversity of self-help practice has emerged witin and between administrative regions. A notable feature of many of this modern generation of self-help schemes is the fact that they have their roots in population relocation. Constantia and Inanda Newtown are not necessarily representative of modern formal self-help in South Africa,

but they share relocation origins and control by local arms of the state.

Constantia, in Kroonstad, is at once one of the new breed of self-help settlements and an heir to the self-help legacy of the Orange Free State. Kroonstad shares with Bloemfontein the early establishment of a township in which owner-building on based sites was officially accepted (Davenport and Hunt, 1974; Van Aswegen, 1970 As in Bloemfontein, the self-help efforts of generations of location dwellers are fixed in the physical fabric of African residential areas in Kroonstad, and the rigours of self-help building are not unfamiliar to most residents. Constantia was designed to replace Marabastad, the oldest self-help enclave in Kroonstad. In 1984, municipal authorities decided to demolish Marabastad, with its "ramshackle and poorly built" houses (Van der Merwe, 1981, p.51), but nothing was done for almost two decades. Spurred by the encroachment of the white residential area of Westpark, the Northern Orange Free State Administration Board decided to proceed with demolition in 1972, and made serviced sites in Constantia available to former Marabastad residents (Van der Merwe, 1981). By mid-1981 nearly 2000 sites had been allocated, with perhaps half of these being taken up by households from Marabastad (Hardie and Hart, 1981; Van der Merwe, 1981).

Like Constantia, Inanda Newtown was established as a reception area for households formerly resident in nearby areas. Some of the oldest squatter settlements in the Durban area are located in the Inanda District (Urban Foundation, 1982a, p.4). Several villages were established on land purchased by blacks before the introduction of the restructured 1913 Native Land Act (Urban Foundation, 1982a). A major impetus to population growth in Inanda came in the decades following 1950, when extensive "slum clearance" programmes were instituted, first at Cato Manor (Maasdorp and Humphreys, 1975, p.62) and then among other squatter settlements in and around Durban (Maasdorp and Humphreys, 1975; Urban Foundation, 1982a).

In 1970, a group of Inanda residents made representation to the South African and Kwa-Zulu governments, requesting a permanent water supply to supplement the inadequate water resources of the Inanda area. In line with its official stance on squatting (Smit and Booysen, 1981, p.92), the central government did not respond, leaving Kwa-Zulu and the Durban Council to take action. A limited supply of piped water was introduced, but the water situation again deteriorated during the drought of 1978-1980 (Urban Foundation, 1982a). After prolonged wrangling over responsibility for the provision of water supplies, exacerbated by the outbreak of water-borne disease, the South African state, through the Department of Co-operation and Development, was persuaded to set aside serviced sites in the Inanda Newtown area. The Department supervised the transfer of households and their belongings, allocating sites and tents to new arrivals in Inanda Newtown (Urban Foundation, 1982). Recently the UF has become

increasingly involved in Inanda Newtown, undertaking to negotiate state subsidised loans, and offering a number of low cost housing packages (Hart and Hardie, 1981; Morris, 1981; Urban Foundation, 1982a, 1982b).

CONSOLIDATION, DEVELOPMENT AND SURVIVAL.

Stripped of any human development connotations, the term consolidation refers to the physical transformation of self-help settlements (Ward, 1976, pp.102-105). In squatter settlements, consolidation may include changes in conditions of tenure, changes in levels of service infrastructure, and the progressive evolution of dwellings. The three formal self-help schemes discussed in this chapter are not squatter settlements, but are legal townships sanctioned, planned, developed and administered by the state agencies responsible for housing in each area. In all three areas, self-help house construction has taken place within a controlled site-and-service framework, with conditional rights of tenure, and with basic services having been installed by state agencies or with state assistance. Whereas physical consolidation may be construed to have infrastructural implications in squatter settlements, therefore, in Mangaung, Constantia and Inanda Newtown it is expressed predominantly in terms of stages of house construction.

It is difficult to work among self-help homebuilders without feeling a sense of admiration for the tenacity and ingenuity of those who negotiate the consolidation gauntlet, often against oppressive odds. A large portion of the huge body of published work on housing and squatting in Third World cities focuses on the individual and collective efforts of upwardly mobile self-help consolidators, and this perspective has been at the root of a pro-self-help revolution in housing thinking and practice that has swept through liberal academia and from 1960 onwards (Bamburger, 1982; Ward, 1982). Following experience gained in Latin American squatter settlements, John F.C. Turner, William Mangin and several associates have emerged as influential champions of the unrecognised resourcefulness seen to characterise the urban poor. Partly as a result of the persuasive and voluminous work of this group, squatter upgrading and self-help have become actively or tacitly accepted strategies in the housing repertoires of many Third World housing agencies and governments (Lea, 1979).

Among self-help protagonists, the principle of self help is often accepted a priori (Harms, 1982), and physical self-help consolidation, in a Third World setting, is seen to assist and accompany the progressive incorporation of marginal populations into urban society and the urban economy (Turner, 1972a; 1976). The Turner group do not always unambiguously specify the relationship between physical consolidation and progressive consolidation or development at psychological or broader social and economic levels. It is suggested,

however, that the physical consolidation priorities of self helpers will change as other developmental goals are met (Turner, 1972a). It is argued, for example, that location relative to employment opportunities will outweigh concern for permanent housing among unemployed young migrants. With relatively secure employment, and with responsibilities toward dependents, the housing priorities of former migrants will relate to security of tenure. Once this is established, the quality of physical shelter will become important, thus expressing identity and social status (Turner, 1972a, pp.164-169). It is implied thus that incremental self-help consolidation is the result of progressive socio-economic and psychological development, or is at least a symbol of such development .

By contrast, and particularly in the earlier publications of the Turner group, there is an emphasis on physical consolidation as a vehicle for socio-economic and psychological development. The model of housing priorities used by Turner to illustrate processes of physical consolidation in squatter settlements has links with the pioneering research of Sewell (Payne, 1984; Sewell, 1964). Sewell described the consolidation sequence underlying the evolution of a squatter settlement in Ankara. In terms of this sequence, initial basic houses were erected by squatters for the dual purposes of obtaining shelter and of securing a residential site. With increasing household sizes and incomes, houses would be upgraded and expanded and tenants would be taken in. In the final stage of consolidation, newer, legally acceptable dwellings would replace the old structures and the squatter community would be absorbed into the formal fabric of the city (Sewell, 1964; Payne, 1982). Implied in this physical consolidation sequence is the role incremental self-help action plays in cementing residential security for illegal squatters. The erection of a shelter is the first step toward legal tenure, which is eventually granted in the face of de facto consolidation at a collective level. Turner recognises the securing of an affordable urban base as a fundamental way in which progressive physical consolidation facilitates further human development, but he elaborates this relationship to include other facets of socio-economic and psychological development, at both individual and group levels (Turner, 1963; 1967; 1968; 1972a; 1972b; 1976).
In overview, Turner appears to argue that incremental physical consolidation facilitates gradual investment and capital accumulation and the use of local materials and expertise stimulates and supports local industry. The process of progressive pysical upgrading of the residential environment is further seen by Turner to bolster self-confidence among self-help homebuilders, to stimulate expectations, and to engender among self-helpers a sense of co-operation and community solidarity.

In support of consolidation and progressive development, the Turner group has devoted considerable energy to detailing the preconditions for ongoing self-help consolidation, and much of the attention of the

group has been focussed on the organisational and technological structures that either retard or promote continuing self-help efforts. The phrase "freedom to build" has come to encapsulate the conditions seen to encourage incremental consolidation (Fichter, Turner and Grennell, pp.241-254), and high physical standards, hierarchical and bureaucratic housing agencies and legal frameworks, and preoccupation with mass standardised housing have been isolated as obstacles to be removed if dormant consolidation momentum is to be fully mobilised (Turner, 1967; 1972a; 1976).

Superficially, formal self-help in South Africa appears to be free of some of the bureaucratic and technological impediments seen to hinder physical consolidation and related progressive development. As mass housing projects outside the homelands have ground to a halt, the state has publically committed itself to providing serviced sites in self-help schemes. Housing standards have been relaxed in many cases and alternative building technologies are being actively explored (Nell et. al., 1983). Overarching these concessions, however, are the segregationist controls that have evolved over generations, administered under the Nationalist government through a centrally administered hierarchical housing system.
Despite recent initiatives designed to increase local autonomy in the administration of African townships, a comprehensive array of checks and controls remain firmly in place. All formal urban self-help schemes in "white" South Africa remain subject to the measures governing influx control and residential separation. In practical terms this means that tenure is restricted to leasehold; site selection, land allocation and physical planning are controlled by central or local state bodies; and participation in formal self help is governed by urban residential qualification and often circumstances such as relocation. Against this background, it is pertinent to ask whether consolidation and development can possily be linked in South African formal self-help schemes in the way they are seen to be associated by the Turner group in Latin American squatter settlements.

An alternative to the approach of assessing levels and forms of development among consolidators in self-help schemes is that of viewing self-help builing as the action of a group of survivors. Turner's associate, Grindley, uses the phrase "survivors with a future" to describe a selected group of self-help owner-builders (Grindley, 1972, p.21), but the term survivors is used in aless optimistic context by Harms to characterise self-help consolidators (Harms, 1982). Here it is argued that within a framework of conflicting social classes and a structure of domination, self-help consolidation is a social practice adopted by a dependent group in the face of acute deprivation (Harms, 1982). In these terms, the motives of those who influence self-help policy are drawn into sharper focus, and the tension between various vested interests is revealed. This perspective is perhaps more incisive in looking at formal, controlled self help in South Africa, especially where self-help participation is

the only route to life-supporting basic shelter.

CONSOLIDATION, DEVELOPMENT AND SURVIVAL IN THE STUDY AREAS.

Physical Consolidation.

Both Constantia and Inanda Newtown have their origin in population relocation. In Kroonstad, the population of the condemned Marabastad area lived in uneasy anticipation of removal for almost two decades. With the establishment of Constantia in 1977 (Nell, et. al.), the fate of Marabastad was finally sealed, and the uncertainty was ended. At the outset, a number of venturesone tenants and some owners in overcrowded Marabastad took what they saw as a rare chance to gain access to new residential land and opportunity, and applied for sites with little hesitation. This first group also included tenants fleeing overcrowded housing in the established areas of Seeisoville and Phomolong, close to Constantia. A second group moved more reluctantly, but inevitably, as the decay of Marabastad progressed. Despite meagre compensation, owners began to move as rental incomes dwindled and as the self-fulfilling physical and social deterioration made living conditions unpleasant. With the demolition of vacated Marabastad houses, many of the remaining tenants were rendered homeless, and many had little alternative but to move to Constantia.

Contemporary Constantia is a heterogeneous mix of shanties and high-standard brick houses, where dwellings under construction in more advanced phases of consolidation are dotted among rudimentary shelters, bare foundation slabs, and sites where abandoned trenches mark earlier attempts to initiate secondary self-help construction. A survey of 1065 occupied sites(Appendix¾, undertaken in 1981 (4 years after the inception of the scheme), showed that 175 houses had been completed, or were close to completion. A further 38 householders were living in portions of their houses, with the remainder of the walls at, or close to, roof height. Some 79 householders were not in occupation of the houses under construction, despite the near-completion of construction work. Another 114 had built a few rooms only, while 34 had made a start by building some walls. A total of 113 householders had laid foundation slabs, while 492 had not done anything on the site apart from erecting a rudimentary corrugated iron or plywood shanty (Hardie and Hart, 1981b). In physical consolidation terms, around 16% of self helpers in Constantia had followed the full incremental sequence to a relatively high-standard house, while 46% had not progressed beyond the first step. According to official statistics, 1840 sites had been allocated by mid-1983, and 450 houses had been completed (Nell et. al., 1983). At this date, therefore, some 24% of sites contained a completed house.

Driven by relocation pressures, the population of Constantia has burgeoned in the last seven years, but this steady growth is quite different in scope and duration to the influx of households that

characterised the early settlement of Inanda Newtown. Between July and December 1980 alone, 2700 familes were trucked into Inanda Newtown from disease plagued and officially neglected parts of greater Inanda (Urban Foundation, 1982a). Tents were issued to new site occupants, but this was done on condition that a more substantial shelter would be constructed within a period of six months. In order to avoid exposure to the elements, and to escape the inadequate tents, most Newtown residents were pressed into erecting at least a wattle-and-daub or a plywood shanty. As in Constantia, early basic consolidation is predominant in Inanda Newtown, with shanties currently outnumbering high standard concrete block and brick houses. In terms of a survey undertaken by the authors in January 1983, 58% of the sampled households were resident in the first plywood or mud shanty erected, while a further 9% were in second or third shanties(Appendix). One fifth of the sample had progressed from shanties to houses erected by the Urban Foundation's team of contractors, and 1% had moved from basic first shelter to an owner-built, substantial structure. Some 10% had avoided the shanties altogether, and occupied UF or owner-built houses which were the first houses they had erected in Newtown. By late 1983, 40% of the 3700 site occupants had built, or were in the process of building substantial brick or concrete houses (Nell et. al., 1983). Most of these were houses financed through state loans administered by the Urban Foundation, and erected in terms of the Urban Foundation's housing package (Nell et. al., 1983).

Manguang has all the physical trappings of an established residential area. In May 1982, there were 11,315 houses in Manguang. Around one third of these were in the older areas of Batho and Bochabela, close to a half were in Rocklands and the rest werein Phahameng (Botha, Vos and Vivier, 1982). In Batho and Bochabela, established at the inception of the Bloemfontein Scheme, there are rows of brick houses, in widely differing states of repair, and with various forms of later building additions. Present building activity in these areas is limited, but a recent survey has shown that most Batho and Bochabela residents believe that the old houses are worth improving (Hart and Hardie, 1983). In the newer areas of Manguang, public housing is mixed with owner-built structures, and recently released plots on the fringes of Rocklands are currently the focus of new self-help building activity. Despite the introduction of state housing schemes in Manguang, self-help remains the primary source of housing. Among owners included in a survey of nearly 300 households, the majority had obtained their houses by owner-building çAppendix). In the older areas, many had inherited their houses, and almost all of these are likely to have been owner-built.

Preoccupation with physical consolidation in Mangaung may direct attention away from the large tenant group that populates the township. The private rental market is the prime source of cheap basic housing, so it is usually in rented rooms that those urgently in need of basic shelter find a place to live. Tenants in self-help

settlements are often overlooked (Gilbert, 1983), and this group in Mangaung is perhaps the equivalent of the shanty residents of Inanda Newtown and Constantia. The extent of private renting is reflected in the multiple occupation of residential sites. In the survey conducted by the authors, 48% of all respondents occupied a site with their own households exclusively. The balance shared a site with at least one other household. In the old areas 70% of respondents shared a site with other households, with 21% co-habiting a site with 3 or more households (Hart and Hardie, 1983). In late 1980, more than 40% of all Batho families were lodgers, as opposed to primary tenants or owners. In Bochabela and Phahameng, 36% of all families were lodgers (Botha, Vos and Vivier, 1982).
The majority of tenants are not new arrivals, but are long-standing residents of Mangaung. The Mangaung household survey shows that close to 90% of the interviewed owners have lived in Mangaung for twenty years or more, as have more than three quarters of the tenants.

Incremental Development or Survival?

The Turner group claims that consolidation is a vehicle for the incremental development of self-help homebuilders because it
a) Wins residential security.
b) Provides affordable housing.
c) Permits capital accumulation and investment.
d) Encourages local industry.
e) Reinforces self reliance and self confidence.
f) Supports community co-operation and solidarity.
(Turner, 1963; 1967; 1968; 1972a; 1976)

Consolidation in the context of formal South African self-help housing does not necessarily secure similar advantages for the participants in self-help schemes. Mangaung, Constantia and Inanda Newtown differ one from the other in terms of levels and patterns of physical consolidation. The built form of each is a map of the collective efforts of past and contemporary self-help homebuilders, but in isolation it reveals little about the significance of consolidation in the lives of those that use it. Drawing on interviews and surveys, Turners six categories of consolidation-won residential advantage are used as a framework for examining the self-help efforts of homebuilders in the study areas. Instead of looking for incremental development alone, however, two key propositions are juxtaposed:

First, that consolidation and its ramifications in the selected formal self-help schemes has primarily won shelter, and hence simply the means for self-helpers to survive and reproduce.

Second, that consolidation has provided platforms for the realisation of progressive and incremental development.

The division between survival and incremental development is sometimes extremely fine. Survival actions are often willfull and specific,

but they may be aimed at achieving some of the very advantages seen to stem developmentally from self-help consolidation. In order to make the distinction, it is necessary to divide self-help actions that are essentially pre-emptive in a survival context from those which are not.

a) Self-help consolidation and security.
Before the Land Act of 1913, the Orange Free State was unique in witholding freehold land from Africans in towns, and in Bloemfontein pass laws were enforced srictly, applying before 1923 and after 1956 to both men and women (Murray, 1983; Schoeman, 1981). After the First World War, co-ordinated efforts at the spatial containment of the African population spawned "a new Kaffir town laid out on modern town planning lines" (Schoeman, 1980, p.285). This "model location" was Batho, today the oldest portion of Mangaung. Self-help builders in the new township were able to apply for housing loans administered in terms of the "Bloemfontein Scheme", and state sponsored loans were granted to bona fide residents of Bloemfontein for the purchase of building materials (Hellman, 1949). As in many modern self-help schemes, it seems likely that physical consolidation and tenure were linked in the Bloemfontein scheme. Loan applicants certainly had to produce proof of sufficient means to build a house within a prescribed period (Hellman, 1949), and the pressure that was applied was immortalised in the place name "Hurry Up" (Schoeman, 1980). It is not clear, however, whether evictions were ever used to coerce tardy builders.

On a broad canvas, it seems that self-help consolidation in Batho and later elsewhere in Mangaung was allowed to proceed for decades without undue harassment. Against the background of the strenuous control of black urban settlement in the Orange Free State, it is thus paradoxically in Mangaung (and in Constantia) that security of tenure seems to be least of an issue among the respondents in our various surveys and unstructured interview exercises çAppendix). This finding perhaps underlines the clear and time-honoured official distinction between "insiders" and "outsiders" in these areas, where those that have won insider statushave enjoyed and continue to enjoy a degree of privilege in the prescribed urban settlements (Murray, 1983). In our Mangaung survey (Hart and Hardie, 1982a), most respondents knew nothing about supposed concessions in urban tenure, such as the 99 year leasehold system, and many felt that such a system served no practical purpose. In a sense, then, security of tenure in contemporary Mangaung has been established by evolutionary self-help consolidation, and by benign neglect on the part of the local authorities.

Although apparently somewhat indifferent to owner-builders in Mangaung, the local government has, over the years, maintained some control over the erection of backyard rooms. Site holders in Mangaung have since the infancy of the township had access to a considerable rental market, and have tapped this by extending existing

dwelling houses, thus avoiding contravention of regulations governing separate shelters (Hart and Hardie, 1983). Backed by a subjective security of tenure, petty landlords have thus used secondary physical consolidation as a route to increased financial security. By the same token, a more general lack of self-help consolidation, due primarily to an officially restricted supply of residential land, has steadily topped up the substantial pool of tenants.

If the legal status of tenure is not prominent in the collective conciousness of Mangaung residents at present, long standing feelings of security may well be challenged in the future, particularly as a result of efforts by the state to redirect African population growth to Onverwacht, some 40 kilometres east of Bloemfontein. Since the end of 1979, Onverwacht (or Botchabelo) has received relocatees from Bophuthatswana and from many sources in the eastern Orange Free State (Murray, 1983; Surplus People Project, 1983). There is, at present, no overt campaign to coerce Mangaung residents into moving to Onverwacht, but the physical infrastructure of Mangaung has been allowed to deteriorate steadily, while efforts to upgrade Onverwacht have continued to tap the resources of the Southern Orange Free State Administration Board and the Department of Co-operation and Development. Survey evidence suggests that Mangaung residents will resist resettlement, even if the alternative is that of sub-tenancy in Mangaung (Hart and Hardie, 1982a).

The predominant form of tenure in the Constantia self-help scheme is that of right of occupation, but a 99-year leasehold option was recently made available (Nell et.al., 1983). Among our interview respondents, in 1981, we found little overt concern about security of tenure, even against the stark backdrop of the ongoing Marabastad removal.

There are at least two explanations for this phenomenon. Firstly, as in Mangaung, Constantia residents remain "insiders" whether they come from Marabastad or elsewhere in Kroonstad. The Marabastad relocatees, for example, whilst having to vacate their houses or their lodgings, have not had to forego the right to live in Kroonstad. Secondly, until recently the Orange-Vaal Administration Board has placed no pressure on slow consolidators, or even on absentee site holders. This "hands-off" policy has recently been reviewed, and it is now an explicit requirement that consolidation commences within three months of site occupation. In cases of default, the Board now reserves the right to repossess sites (Nell et.al., 1983), but it is a moot point whether those stripped of site tenure in this way will also lose urban tenure. At present it is reasonable to suggest that dispossessed former Constantia residents will disperse to become tenants in other townships close to Kroonstad.

There is evidence of considerable uncertainty among Constantia residents as to what constitutes officially acceptable self-help consolidation. Wood and iron shanties remain the essence of

Constantia, but where further consolidation has been initiated, the physical results, be they in the form of foundation slabs or finished houses, are usually characterised by good workmanship and the use of commercially available materials. This potentially self-defeating and expensive striving for the "best" in materials and building skills appears to be reinforced by an implied official housing standard, and the conviction that standards will be policed by the Administration Board. Fuelling this sense of insecurity, in 1981 at least, was the rumour that parts of the first houses to be built in Constantia were condemned on grounds of inferior quality. On the assurance of Board officials, walls were demolished only where they had crossed building lines, but a failure to communicate this reason appears to have sparked the fear of official action in response to inadequate standards, and strategies to secure consolidation efforts have entrenched the use of hired contractors and costly materials (Hart and Hardie, 1983; Nell et. al., 1983).

Among survey and interview respondents in Inanda Newtown, two features of the scheme are consistently and positively underlined. These are the availability of piped water, albeit from communal standpipes, and the opportunity to occupy a residential site permanently. Since Newtown was established to receive relocated squatters, and more particularly those from areas threatened by water-borne disease, these sensitivities are perhaps not surprising. But it is not only among former squatters that the relative security of tenure offered by Inanda Newtown is recognised. Over time, Newtown has also attracted households vacating rented lodgings in nearby Kwa Mashu and Ntuzuma. There is evidence that some of these households posed fraudulently as squatters to gain early entry to the Newtown scheme, thereby securing land in a dwindling supply of serviced sites (Hart and Hardie, 1983).

Where the right to occupy a site in Inanda Newtown seems to be valued by most of its residents, it is perhaps to be expected that site holders will give serious attention to actual or implied links between consolidation and tenure. New arrivals are placed under immediate pressure by the Administration Board, which allocates tents for a period of six months. Households that have not erected a basic shelter by the time the tents are reclaimed face exposure to the elements, and according to some informants, eviction from the site. We interviewed a householder who had hastily assembled a token plywood shanty barely hours before his tent was due to be removed. The pressure to consolidate appears, however, to extend beyond primary consolidation. Over a period of some five years the UF has supervised the construction of close to one thousand variously sized concrete block houses in Inanda. In a survey conducted in 1983, the majority of 125 respondents stated that houses of this kind were favoured by the local authority (Appendix). Some informants appear to believe that the erection of an approved high-standard house is an insurance against eviction, and among those that concur, ongoing advanced consolidation must pose a daunting challenge (Hart and Hardie, 1983). Of course, if the Administration Board or the UF

desire rapid consolidation in Inanda Newtown, it is in their interest to do nothing to allay fears related to tenure.

Since Mangaung, Constantia and Inanda Newtown are, by definition, formal self-help schemes, the state offers some form of residential tenure to all who qualify to participate, whether voluntarily or not. In Mangaung and Constantia, "insiders" have enjoyed a degree of subjective security that appears to have weathered, in the Constantia case, the Marbastad relocation. This security contrasts with the sense of newly-won and somewhat vulnerable tenure that is evident, particularly among former squatters, in Inanda Newtown. Here the popular perception of officially acceptable housing appears to have spurred among some residents a drive to move quickly along the consolidation path, as an insurance against possible official action and feared eviction. A weaker pre-emptive consolidation drive is present in Constantia, but in this case it is the self-help houses themselves which are believed by some to be threatened. This has lead, in some instances, to the pursuit of impossible standards, and had actually slowed overall consolidation.

Against the background of all who have passed through self-help housing schemes, those that have consolidated sufficiently to remain and reproduce are all survivors. For many of those forced into externally motivated action by building deadlines and rumoured official building standards, survival remains a day-to-day reality, as it does for unwilling relocatees whose resources and abilities have permittd only the rudest of shelter, and perhaps subjectively a tenuous residential security. By contrast, a sense of security has probably backed the pursuit of ongoing physical consolidation among self-help homebuilders who are able and willing to negotiate the difficult course. It would be misleading to suggest that all the houses in the three areas have been built out of dire necessity and fear, just as it would be incorrect to suggest that few self-help homebuilders have gained a security advantage through self-help. Perhaps the clearest example is that of the Mangaung landlords, whose house extensions and relative freedom from official harassment have allowed them to tap the resources of those who have not survived in the self-help context, the tenants. This in turn, though, is not to imply that all landlords are living luxuriously. It is our experience that many landlords in self-help schemes as old as Mangaung are elderly, retired people, for whom rent is itself a means of survival.

b) Self-help consolidation as an affordable urban base.
The built environment of contemporary Mangaung is perhaps confirmation that self-help consolidation is, in the long run, an affordable route to the establishment of an urban residential base. This view can be argued even more strongly when it is realised that a great deal of past and current self-help building in Mangaung was not, and is not supported by finance in the form of loans. It is thus tempting to hold consolidated self-help settlements up as examples of the

standards of housing that can be achieved among those who command limited income. Without even seeking to determine the real cost of incremental consolidation, such a practice can be demonstrated to be misleading, especially in self-help residential areas as old as Mangaung. As suggested earlier, the process of incremental self-help consolidation itself selects those who will be best equipped to see the sequence through. Thus in Mangaung, while it can be postulated that self-help consolidation provided an affordable urban base for those that have successfully consolidated, the same cannot be said for others that have fallen by the wayside somewhere along the consolidation route, or for those that have not even taken the first few steps. In the context of the chronic shortage of residential land, there has been no real test of the affordability of self help housing among current tenants, but it is certain that the tenant population will contain an element that would be unable to negotiate even the earliest levels of consolidation. Of course, if sub-tenancy is accepted as an adjunct to self-help, then self-help in Mangaung has indeed provided cheap, and probably in most cases affordable shelter for the tenant population. Tenants in self-help can, however, lay claim to few of the other developmental benefits seen to accrue to self helpers, particularly in the areas of security and investment (Gilbert, 1983).

Many Mangaung residents have inherited houses built by parents or other close relatives, and for these people the self-help houses are superficially emminently affordable, especially when contrasted with increasingly expensive rentals in state-owned houses. Many of the old houses in Mangaung are in advanced stages of decay, however, often requiring major and expensive structural repair to render them habitable. Survey material indicates that minor house improvements are common in Mangaung, but relatively few householders have undertaken major structural additions or repairs (Hart and Hardie, 1982a). This may relate in part to cost. Clearly, the filtering mechanism implied by the inheritance process may not always work smoothly, especially where the housing supply is severely curtailed, and where extended families occupy single dwellings. We were told that a popular expedient to circumvent the pressures of overcrowding is for elderly unemployed family members to move to Onverwacht. Just how widespread this practice is is uncertain, but it implies that the migrants have to restart the cycle of consolidation elsewhere. In this case, the heirs apparently gain access to cheap housing, but in practice the affordability problem is simply exported.

Although almost half of the present population of Constantia lived originally in Marabastad, not all relocatees were house owners. In fact there are several distinct groups of residents in Constantia, each having a different residential background. This background has determined conditions of entry into Constantia, but it also has a significant bearing on the chances of pursuing self-help consolidation, especially beyond rudimentary shelter. Owners, for example, received compensation based on an outdated valuation roll.

In most cases, this compensation was sufficient to provide basic shelter, but not to replace the houses demolished in Marabastad. Among our respondents, compensation varied between R300 and R700 (Appendix). Ex-owners in stable wage employment and with access to loans have, in many cases, succeeded in building substantial houses, but others have not progressed beyond corrugated iron and wood. Retired, disabled and unemployed former owners, deprived now of rental income, seem destined to remain in the shacks they were obliged to erect. The basic shelter demanded by forced homelessness similarly appears to be the lot of displaced tenants from Marabastad, including as this group does households that were trapped by extreme poverty in cheap rental accommodation (Hart and Hardie, 1983).

Breaking into secondary consolidation is difficult in Constantia, and the physical evidence of abortive attempts to do so is dotted among the shacks and the brick and block houses. Implied housing standards have served to make the erection of substantial houses a costly exercise. Limited credit is extended to some self-help builders by local materials merchants, at often undisclosed interest rates (Hart and Hardie, 1983; Nell et. al., 1983). The Orange-Vaal Administration Board makes low-interest loans available, but Constantia residents have shown considerable resistance to making use of the offer. A strong undercurrent of mistrust seems to underly this resistance, reinforced to a degree by interest-free loans made available particularly by multi-national employers. Against this datum, interest rates on state loans are often construed to be exploitative. Other lenders benefit from the mix of efforts to comply with standards and the loan impasse, and there is evidence that small "insurance" companies are active among the Constantia self-help consolidators (Hart and Hardie, 1983).

Most Inanda Newtown residents were tenants in their former areas of residence, and have often brought little into Newtown to assist them with the task of consolidation. Former shack owners have sometimes simply re-erected plywood or iron houses. Where they have been able to avoid the demolition of a vacated squatter house, some Inanda self-help builders have subsidised their new consolidation efforts with rental income obtained by letting the vacant dwelling to a new generation of squatters. In the context of sporadic state action against squatters, this income is acknowledged by those that have access to it to be precarious, but it is seen to be a significant supplement while it lasts.

As with all self-help schemes, a physical consolidation census would suggest that self-help housing, particularly at its most rudimentary, is within the means of Inanda site occupants. Such a conclusion is certainly tempting in the context of our own randomly based survey, where all households had managed some level of consolidation, but it ignores the unknown number of households that have dropped out or have been forced out of the scheme. Two major consolidation routes have been followed by Inanda residents who have managed to erect

second-stage high-standard houses. A relatively small number have self-built, or have hired contractors, but by far the majority of secondary consolidators have opted for the housing package offered by the UF. The UF system of pre-designed houses erected by a local contracting cartel is a trade-off between slow incremental consolidation and cash expenditure and rapid construction and regular loan repayments. The degree of involvement of the contractee is low in the UF system, removing the UF houses from the arena of strictly defined self-help consolidation. The UF housing strategy rests heavily on subsidised loans, and the criteria for the granting of these loans explicitly divide low-income, stable wage-earners from the remainder of the population. Typically, the sum of R2500 is made available to applicants who are in wage employment and who earn less than R350 per month. Consolidation in the form of UF housing is thus affordable for those within the income cut-off who can cope with monthly repayments that vary between R8 and R13 per month according to income (Nell, et. al., 1983). The effect of these rules is clear among our small sample of 125 respondents. Among households where the head of household earns less than R320, 32% have had UF houses built, while in the most affluent income category, R320 or more, 18% have been able to qualify for the state loan. Among this latter group most successful loan applicants probably fell, at time of application, below the R350 limit, or some may have disclosed their incomes inaccurately, either in the context of our survey, or to the officials examining the loan applications. All but one of the five owner-built high standard houses in our sample were erected by households where the head of household earns more than R400 per month.

Shacks are, in general, a relatively affordable form of physical consolidation, and it is this basic life-supporting form of shelter that has allowed many to survive in the self-help arena. By virtue of their different ages and contrasting settlement histories, the three study areas have offered different opportunities for self-help homebuilders to move beyond survival shelter. In Mangaung, a life-cycle based residential filtering mechanism ensures that some young people acquire self-built houses erected by parents or grand parents. This is a means of recycling affordable, substantial housing, and perhaps even of passing on an income from rentals. In cases where old people are displaced to facilitate filtering, however, this ill-equipped group are forced into survival circumstances elsewhere. Even ownership of an inherited house is not necessarily cheap and some Mangaung owners find it difficult to keep old houses intact.

In the younger schemes, opportunists have grabbed self-help willingly, and with the necessary means, some have consolidated effectively. But the circumstances of establishment of Constantia and Inanda Newtown have also pressed many into consolidation that supports survival in the face of induced homelessness. These survivors include impoverished former Marabastad tenants, and poorly compensated

former owners, especially those that are unemployed or elderly. In Constantia, the high building standards have prevented many from leaving the initial survival shelter. For those that have, some have erected houses that are adequate by any physical and social standards, and particularly when compared with typical public housing. In Inanda Newtown, the UF system has provided the opportunity for residents to break away from primary shelter, but for some even this consolidation path is dictated by the survival imperative of remaining in Newtown. For others, the UF option offers a means to exchange slow consolidation and cash payment for rapid house construction and regular monthly loan repayment. Among well paid, salaried people, the subsidised state loan has permitted greater expenditure on consumer goods, as the Inanda survey shows (Appendix).

c) Self-help consolidation and opportunities for investment and capital accumulation.

There is no doubt that self-help homebuilders in Mangaung and in its antecedent townships have spent considerable amounts of money in the course of residential consolidation. In 1908 Waaihoek location was characterised by "rows of neat, brown, foursquare, iron-roofed cottages" (Schoeman, 1980, p.220), which had been self-built by their owners at a cost of 300 Pounds. It is unlikely that consolidation such as this provided a reliable vehicle for investment and capital accumulation, however, since Waaihoek was one of several communities condemned to removal after the First World War, and it deteriorated steadily until the township vanished without trace in 1941. In any event, with an ever-present shortage of housing and hard-won security of tenure on specific leased sites, it seems reasonable to expect that there was little commerce in housing. Our own respondents have frequently explained that where simply aquiring shelter is difficult, even an inadequate house often has to be accepted as a permanent home.

In the relative absence of a housing market, the investment value of consolidation in Mangaung is limited. Houses are bought and sold, but it seems that in many cases the purchasers buy houses that they already occupy, either as members of a family or as tenants in state-owned houses (Mabin and Parnell, 1983). A more tangible investment is consolidation for the accommodation of tenants. Rents vary widely, but typically R20 per month is charged for one or perhaps two rooms (Botha, Vos and Vivier, 1982). This accommodation is often seen as inadequate by tenants, but they have few residential options (Hart and Hardie, 1982a).

As in Mangaung, there is little doubt that money has been spent by self-help consolidators in Constantia. Among our small group of interviewees, amounts exceeding R10 000 have been committed to the construction of brick or concrete block houses, and imtermediate stages of consolidation have, in many cases, absorbed company loans and compensation cheques ranging between R300 and R800. Shack builders, too, have spent considerable amounts of money on materials

and on hiring members of a new breed of contractors who specialise in erecting iron and wood structures. According to one informant, a single sheet of corrugated iron cost R7 in 1979.

Constantia is only seven years old, and in the context of site allocation and the acute shortage of accommodation elsewhere, there is little, if any, residential mobility. Where Mangaung has a limited housing market, Constantia probably has no market at all. Thus there is no precedent by which to assess the investment value of consolidation in the Constantia self-help scheme. Tenants have not become entrenched in the scheme, so consolidation for rental is an investment route that is at present unexplored. The absence of tenants is perhaps explained in part by the fact that many households have yet to house themselves adequately. There also seems to be a reluctance, among those interviewed, to share their houses with others. We have no evidence of an official ban on tenants in Constantia, but it is possible that rumour of such a restriction has prompted site occupants to avoid lodgers, or simply not to declare their presence.

Using local contractors and bulk purchased materials the UF has managed to keep building costs low for the participants in its Inanda housing scheme. In 1983, costs per square meter ranged between R72 for completed houses without ceilings and unplastered walls and R55 for shell houses with no internal divisions, ceilings or floors (Nell et. al., 1983). At these prices a small shell house would cost R2500 and larger houses anything from R4000 upwards. Whether building costs are any index of resale value, however, remains to be seen, since in common with Constantia and Mangaung there is no housing market.

Shanty building is perhaps a more immediate investment, because there is demand for materials such as wattle poles, plywood and corrugated iron in Inanda Newtown and the surrounding squatter areas. In 1981, the cost of a simple plywood shanty appeared to range between R200 and R300, depending on the extent to which contractors were involved. One of our informants sold his plywood house for R200, but smaller amonts are typically obtained for used and re-used materials. The survey shows that a minority of secondary consolidators attempt to sell, or to find buyers for redundant building materials. It is unclear why this should be the case, but if the costs of shanty erection are not recouped, these have to be added to the costs of building more substantial houses, and can in no way be termed an investment.

A small minority in our survey have built houses subsequent to the erection of the first mjondolo whilst leaving this latter structure standing. None of the householders that have adopted this strategy admitted to having lodgers, but if lodgers are housed in preserved shanties, this could become a focus of investment. There is no direct evidence that the local authorities have taken action to ban

multiple shelters on single sites, but since multiple structures are seldom seen, there may be direct or indirect pressure on consolidators to demolish shacks once a second house has been built.

Investment and capital accumulation are at best latent benefits of self-help consolidation in Mangaung, Constantia and Inanda Newtown, since there is little opportunity for homebuilders to liberate the money spent on housing where residential immobility is the norm and where housing markets are all but absent. Especially in the case of advanced physical consolidation, and particularly in Constantia and Inanda Newtown, the return on so-called self-help investments is largely untested. Consolidation for tenants is a direct investment in Mangaung, and it may also be so in Inanda Newtown, specifically where residents in secondary stages of physical consolidation have been able to leave old shanties standing on Newtown sites, and where vacated squatter dwellings have remained untouched by demolition squads. Shacks may also be an investment, albeit a poor one, in areas where second-hand materials are in demand. A limited market for used materials may exist in Constantia, while a more active exchange of materials probably takes place in and around Inanda Newtown.

Renting and resale of materials are of course dependent upon the availability of alternative accommodation for the households seeking to use such sources of income. For survivors, whose basic shelter is itself barely adequate, and where there is little possibility of erecting housing to replace the shacks, even this avenue of investment is closed.

d) Self-help consolidation and local industry.
Local building contractors are present in all the self-help schemes we have visited. The size of contracting operations in these areas is relatively predictable, with most contractors employing fewer than ten skilled and unskilled workers (Hart and Hardie, 1982b). Most businesses are controlled by a single contractor, and almost all of these small contracting concerns offer labour only (Hart and Hardie, 1982b). In any one self-help scheme, it is unlikely that the local construction industry accounts for anything but a small proportion of the economically active population.

While ongoing self-help consolidation undoubtedly supports an associated local building industry, restrictive controls on employment, and the strict policing of these regulations in white areas, make it difficult for African builders to move beyond a particular self-help scheme when building activity wanes (Hart and Hardie, 1982b). The building industry in areas like Mangaung is thus transitory, moving from one scene of construction activity to the next, or simply being absorbed into the formal corporate construction sector. In Mangaung the body of contractors is subject to attrition as Onvewwacht takes up the slack in self-help consolidation. Were all building activity in Mangaung to cease, few independent local

contractors would remain.

We have met self-help homebuilders in Constantia who have been prepared to undertake most of the construction work themselves. There are, however, specialised tasks like plastering and roofing that are commonly sub-contracted. In many cases entire structures have been erected by contractors, these ranging from primary consolidation in the form of shacks to large and technologically sophisticated houses. Some of the contractors are local residents, but a share of the contracting work is taken by building supply firms in Kroonstad itself. These companies are able to provide and transport materials, and are particularly active in finishing and roofing the high-standard houses that tend to characterise advanced consolidation in Constantia. Many small contracting enterprises offer labour only, and materials are purchased by the owner-builder. Again, merchants in Kroonstad are the primary source of supply. We did not specifically investigate price structures, but from information offered by interview respondents, it seems that retail prices are charged when cash is tendered, and that accounts carry an additional charge in respect of interest.

Apart from the materials suppliers, others in Kroonstad have benefitted from consolidation activity in Constantia. The Administration Board reuires that building plans be approved before permanent structures are erected. Plans drawn by architects in the town have proliferated in Constantia, and typically cost R25. It appears that no counselling service is offered by the architects, and aspirant builders often buy plans that are grandiose in relation to the resources they command (Hart and Hardie, 1983).

Based on the Inanda Newtown survey, it seems that many respondents built their mjondolos or shanties themselves, or with the assistance of appropriately skilled family or friends. There are undoubtedly some specialist shack builders operating in Inanda, however, and it seems likely that these contractors operate beyond the Newtown borders as well. In fact, such contractors may well have developed their skills in the squatter settlements, before Newtown was established.

The UF contracting team have benefitted from the steady flow of building contracts, the cash flow guaranteed by the availability of loans, the technical assistance made available by the Foundation and the protection against competition offered by the exclusive nature of their combined contracting enterprise. As a result of these benefits the UF contracting group have built up an infrastructure of capital, equipment and skilled labour that is in stark contrast to the circumstances of many black contracting operations (Hart and Hardie, 1982). The future of this contracting cartel, without the patronage of the UF, and in the absence of readily available loan finance, is uncertain. Elsewhere in South Africa African contractors have faced crippling restrictions and standards when seeking to break into the white market. The Newtown cartel may well be ill-equipped to tackle

such a daunting task, especially since they have tended to specialise in the construction of low-cost, unfinished housing, and have had accessible to them a pool of unskilled, unregistered labour that would be unacceptable within the labour control net of the Port Natal Administration Board. Another alternative open to those contractors would be that of moving into the relatively unregulated homeland areas of surrounding Kwa-Zulu, but it is unlikely that suitable markets and finance will be found there.

Mjondolo builders in Inanda Newtown seem in the main to have made use of the network of formal and informal materials suppliers that serves the squatter market. Packing case panels are bought directly or indirectly from the motor assembly plant in Durban, wattle poles and iron are obtained in the community, from local Indian merchants or from the UF store, and window and door frames often come from second hand sources, the UF, or hardware stores in central or suburban Durban. The source of the materials used by the UF has yet to be investigated, but it is likely that formal suppliers that are able to mass produce building materials are used.

In all three study areas, a local industry has supported self-help consolidation, and in so doing has provided employment for a small number of residents in the self-help schemes. In many cases, though, these small specialist contracting enterprises are dependent on ongoing local building activity for their survival. When self-help activity slows down or ceases, small contractors find it difficult to break into more competitive and protected local white markets, and have to move on or disappear. Inanda Newtown probably provides the best opportunity for a self-sustaining local building industry, because the surrounding squatter settlements will probably continue to provide a substantial, if sporadic, flow of construction work. The UF building team have been nurtured by the agency, but despite the provision of infrastructure and training, this team may have limited possibilities for ongoing contracting outside Inanda Newtown.

Self-help building materials and plans are obtained mainly outside the community in Constantia. Merchants and formal builders may employ Constantia residents, but the numbers are probably small. In Newtown, mjondolo materials are often obtained from local neighbourhood suppliers who also serve the wider squatter settlement. Other building requisites are bought beyond the borders of greater Inanda.

Local industry serving self-help consolidators in formal self-help schemes is itself engaged in a struggle to survive. On the crest of a building wave, contractors and some of their workers may earn well enough to assist with their own residential consolidation efforts, but this activity could well slow down in direct parallel with a more general curtailment of self-help building. There are many possible causes of such a cutting back of physical consolidation, but in the

three study areas the primary cause is the limited allocation of residential stands by the state.

e) Self-help consolidation and self-reliance, self confidence and expectations.Mangaung has a long history of self-help, but this does not necessarily mean that all residents in the area are steeped in the practical ramifications of self-help consolidation. In fact, if tenants and those who have aquired houses by means other than self-help building are excluded, it is likely that a minority of the population of Mangaung has actually negotiated the consolidation path. Despite this, there are probably few people in Mangaung who have had no contact at all with self-help, especially since most residents have spent their entire lives in the area, and can trace roots in the area that go back in time several generations (Hart and Hardie, 1982a). In the context of both direct and indirect contact with self-help consolidation, it seems that many in Mangaung, owners and tenants alike, believe that owner-building is both possible and desirable. From our survey, it is apparent that most tenants would prefer self-help to renting. Confirmation of this is to be found in tenant responses to a question juxtaposing the desirability of building a house in Mangaung and renting a Board house in the area. Both options imply the availability of a dwelling for single family occupancy, but the self-help alternative was preferred by nine out of ten tenant respondents (Hart and Hardie, 1982a). Owner-building, in a broad sense, was seen by two-thirds of the survey respondents to be within the capabilities of ordinary people. Among the remaining third who doubted that ordinary people could build houses, half believed that self-help house construction would be possible if "advice" were available (Hart and Hardie, 1983). In the context of limited self-help activity in contemporary Mangaung, these optimistic visions of the viability of self-help, and the implicit self-reliance of the population, remain untested. A 1000-plot extension to Mangaung was recently announced, and this will issue an urgent challenge to presently passive self-help protagonists (Hardie and Hart, 1984). It remains to be seen whether the experience of Constantia will be repeated, where expectations have tended to run ahead of real self-help resources.

Africans in Kroonstad share the self-help heritage that is typical of urban areas throughout the Orange Free State (Van Aswegen, 1970). Since most Constantia residents are either former tenants, or ex-owners of long-established houses in Marabastad, few are likely to have first-hand knowledge of self-help consolidation. This lack of practical experience, however, belies an apparently widespread and firmly held conviction that self-help is a feasible route to habitable shelter, similar to the generally positive view of owner-building that prevails in Mangaung. This often misplaced faith in self-help, coupled with the pre-emptive pursuit of high construction standards, has had some bizarre consequences in Constantia. Patently unrealistic house plans are often purchased uncritically and in many cases large foundation slabs have been cast, in the often vain

conviction that the imagined house will inevitably materialise (Hart and Hardie, 1983)
There are probably few Inanda Newtown residents who have not had direct contact with the practical demands of mjondolo building. Most respondents in our survey show a degree of confidence in the collective ability of the Newtown community to erect shacks, and 84% reject the suggestion that mjondolo building is a task for experts. That this self-reliance extends to the self-help erection of concrete block and brick houses is doubtful, however, especially since hands-on experience of these technologies is limited in the context of the UF scheme. Among the survey respondents, less than a third agreed that "ordinary" people could build brick and block houses.

When we interviewed Newtown residents in 1981, we found a strong resistance to the concept of long-term loans, and fears were often expressed about the ability of local householders to guarantee regular and prompt repayment, especially in the face of possible illness or loss of employment (Hart and Hardie, 1982). The deposit required by the UF was also often cited as a major obstacle for prospective loan applicants. The deposit clause was recently dropped by the UF, and between 1981 and 1984, loan applications have burgeoned. This may indicate a growing understanding of long term loans among the Inanda community, and an emerging confidence that has broken earlier resistance to loans, but it may also, in part, reflect fear and the growing belief that advanced consolidation is necessary to retain tenure in Newtown. In the second scenario, the mistrust of loans is in conflict with the perceived need to obtain finance in order to consolidate.

Whatever the forces driving consolidation in Inanda Newtown, all but two of the respondents in our survey expressed the expectation that Newtown would ultimately become a better place to live. In the respective opinions of the two dissenters, "as this place becomes bigger, it will become a bad place, like Kwa-Mashu", and "all this place offers is mud houses for those who cannot afford Foundation houses".

The residents of Mangaung and Constantia are characterised by a wide range of consolidation circumstances, yet a large proportion have considerable confidence in their ability to pursue advanced physical consolidation. In both areas, this confidence and self-reliance remains largely untapped in recent times, and it may prove to be misguided in some instances, when the task becomes real. This is certainly the experience of some pioneering secondary consolidators in Constantia, who despite expectations have remained for years in basic life-supporting shelter. For others that have been able to match confidence, expectations and the resources to pursue high-standard sophisticated housing, the results have been impressive, and self-reliance and confidence have proved to be a catalyst to vastly improved living conditions.

In Inanda Newtown, practical experience of shanty buiding among former squatters may have made the task of initial survival a little easier than it was for new site occupants in Constantia. Drawing on this experience, it is quite common for Newtown residents to extend and enlarge basic shacks, rather than to pursue the consolidation path to more conventional housing. The UF scheme has, to a degree, bypassed the resistance to high standard building by taking this task out of the hands of the Inanda Newtown residents. In its place, advanced consolidation has demanded a degree of confidence in the concept of long-term loans. For those that do not have this trust, but pursue the UF alternative pre-emptively, the monthly repayments are individual contributions to continued survival. In other cases, regular small monthly remittances may release income to be used elsewhere.

f) Self-help consolidation and co-operation and solidarity.
Over almost a half a century, a predominarily passive form of community solidarity appears to have evolved in Mangaung. The contemporary population is, for instance, united in social and kinship networks that have crystallised over generations (Hart and Hardie, 1982a). These networks and associations have thrived in the context of residential immobility as a result of site allocation and the housing shortage. The survey shows that the residents of Mangaung are one in the knowledge that although the township is poorly serviced and is in considerable physical disrepair, there is no acceptable residential alternative (Hart and Hardie, 1982a).

During the twenties, when the Bloemfontein Scheme was at its most active, a more dynamic sense of solidarity and co-operation appears to have prevailed in the consolidating areas of Batho and Bochabela. Public meetings were regularly convened and well attended, and even elements of the white population were ready to meet with the residents of the Cinderella African townships (Schoeman, 1980). The period of optimism and raprochement was to be short lived, however, as the depression sapped the limited resources of the township residents and the self-help builders, and as whites once again withdrew into an isolation enforced through a nightly curfew (Schoeman, 1980). This turnabout, on the surface at least, was an effort to distance white Bloemfontein from the perceived threat of a wave of petty crime in Waaihoek and Batho.

It is not clear whether informal networks of self-help buiders have ever operated in Mangaung. It seems probable that contractors were widely used by self-help consolidators unable or unwilling to build alone. Among contemporary residents, it is apparent that owner-building is understood to accommodate sub-contracting on the part of the self-help builder (Hart and Hardie, 1982a). While the question of co-operation among self-helpers has yet to be carefully investigated, it seems reasonable to postulate that consolidation in Mangaung has been, and remains, a largely individual activity.

Constantia is perhaps far too young to expect a web of social and kinship links to have evolved to the degree that it has in Mangaung. In fact, the Marabastad relocation has served to break or weaken links that may have existed in that township. Taken block by block it does seem that some Marabastad relocatees have managed to form small enclaves, but overall, households of varying residential origin are mixed throughout Constantia. Co-operative building seems to be virtually absent, and there is perhaps more compelling evidence to suggest that consolidation cements ilolation than there is to indicate that it builds solidarity. We found isolated but open rivalry between consolidating neighbours, but much more commonly site occupants professed little interest in the affairs or the house-building efforts of surrounding households. Where differences in self-help effort and resources are as stark as they are in Kroonstad, studied disinterest may well be a device to obviate neighbourhood tension.

In Inanda Newtown, it seems quite common that families and friends co-operate in the erection of mjondolos, a practice that has probably been carried over from the squatter areas. In some cases, contractors are used to perform specialist taks, with the remaining building and finishing work being undertaken by the owner builders and their informal helpers. The UF scheme has tended to run counter to co-operation in that loans are granted to individuals, and the housing delivery system is not reliant on a system of social connections. In the early days of the Inanda Newtown scheme, the very ownership of UF houses appeared to divide those that had taken this consolidation route from those who remained in the shanties. We found a palpable lack of communication between elements of these two groups in 1982 (Hart and Hardie, 1983), and one informant, a UF house owner, complained of overt ostracism. It is not known whether the schism persists, now that UF houses are more numerous.

A Residents Committee was established by the UF as a means of communicating with the residents. The forum has not proved to be particularly successful (Nell et. al., 1983) and has lost momentum. This breakdown may in part reflect the inability of the Foundation and the local authorities to respond to the grievances often aired at such meetings, but it is also perhaps the fate of an artificial solidarity that does not have roots in the real concerns and expectations of the community. An informant interviewed in 1982 may well have encapsulated the sense of top-down imposition when he said of Residents' Committee meetings "they tell us what do do".

In Inanda Newtown, family networks and friends often appear to be mobilized in the exercise of mjondolo building, thus assisting consolidators who find it financially or physically difficult to erect even survival-supporting shelter. There is by comparison little evidence of co-operative building groups having developed in Mangaung, and few examples of such community aid have been found in Constantia. In both of these areas consolidators appear to have worked alone, or

more commonly with the assistance of hired contractors. There is thus often little help for those who are struggling to survive, and this battle is thus commonly an individual one. The UF housing scheme similarly individualises the trials and triumphs of participants, and in the pst has split the community between isolated UF houseowners and the occupants of mjondolos. Attempts to encourage residents committees in Inanda Newtown have to a large extent failed to break down the isolationism, tending as they have to represent the interests of the housing agency and the local government.

A form of solidarity in adversity seems to exist in Mangaung. While this may not represent an overt appropriation of their own interests by the Mangaung community, it may underpin a resistance to external efforts seeking to undermine survival and incremental development.

CONCLUSION

With the breakdown of the formal mass housing systems that have for decades held sway in African urban townships in South Africa, a contradiction has emerged in the form of an advocacy of self-help housing strategies, and the incorporation of these seemingly anarchic procedures (Burgess, 1978) into state housing policy. Self help within control and constraint is superficially an anachronism, but the revival of interest in this form of housing is perhaps inevitable in the face of a perceived crisis. This renewed interest in self help has brought into focus long-lived self-help schemes that have weathered repeated assaults on the practice of owner-building, and it has drawn into sharp relief the new generation of self-help residential areas that have, since 1976, sprung up all over South Africa (Hart, 1983; Nell et. al., 1983).

That self-help housing has emerged at all is in part testimony to the motivation and perseverance of the self-help homebuilders themselves, but it is also a reflection of the lengths to which deprived people will go when faced with the imperative to survive. At a time when the advocacy of self-help housing provides the idealogical and economic means (Burgess, 1978) to defuse conditions of housing crisis, and when supporting orthodox visions of self help have tended to celebrate the social, economic and psychological advantages accruing to owner-builders through the process of physical consolidation (Turner, 1963; 1967; 1968; 1972a, b; 1976), the survival context of self-help housing is in acute danger of being ignored. There is little doubt that existing self-help practice in South Africa portends developments under the "new dispensation", and that growing numbers of Arfican people will become consolidator-developers, or self-help survivors (Hart, 1983).

The impact of formal self-help in the lives of its participants is by no means uniform, nor are individual and group situations immutable. In Constantia, the desperate plight of two elderly respondents was

dramatically changed when a working professionally qualified daughter committed herself to Constantia and her earnings to the erection of a house. In Inanda Newtown, the opposite trend could well emerge, particularly if the Port Natal Board persists in the practice of refusing to grant work permits to the children of registered Newtown residents (Hart and Hardie, 1983). Changing circumstances aside, there are clearly many self-help homebuilders in Mangaung, Constantia and Inanda Newtown for whom physical consolidation and survival have been closely linked. All self-help homebuilders are survivors, but for some the struggle has been an arduous one. These include the relocatees, and especially the elderly, the unemployed and the infirm. Also included are those threatened by insecurity, however subjective, and forced into pre-emptive consolidation. The self-help building contractors are engaged in a struggle to survive in the midst of fluctuating markets and crippling restrictions. In some areas like Inanda Newtown, survival is perhaps facilitated by a working knowledge of basic building technologies and the existence of co-operative consolidation networks at the level of shack building. Many Constantia shack builders have grand visions of large houses, but are hard pressed even to assemble life-supporting shelter.

In many ways, the residents of Inanda Newtown come closest to realising the socio-economic and pychological rewards seen by the Turner group to accompany physical incremental consolidation. Newtown is an organic part of the surrounding squatter settlements, so it draws upon the larger informal construction infrastructure. Expertise, materials and assistance are thus available to mjondolo builders at least, and at this level the advantages of affordability, a local labour force, confidence and co-operation are readily mobilised. In Mangaung and Constantia, confidence abounds, but this is countered to a degree by a relative lack of investment opportunity, an ephemeral building sector and expensive secondary consolidation. But even here inexpensive basic shelter has enabled many residents to divert finds to high-standard homebuilding, and they have themselves provided housing that far surpasses typical "scheme" housing in terms of physical quality and liveability.

APPENDIX: Interviews and questionnaire surveys conducted in Mangaung, Constantia and Inanda Newtown.

1) Mangaung: Interviews with builders, early 1982 (Hart and Hardie, 1982b).

2) Mangaung: Interviews with residents, mid 1982 (undocumented).

3) Mangaung: Questionnaire survey, mid 1982 (Hart and Hardie, 1982a).

4) Mangaung: Interview/questionnaire survey, mid 1984 (Hardie and Hart, 1984b).

5) Constantia: Interviewes with residents, mid 1981 (Hardie and Hart, 1981b).

6) Constantia: Revisits, 1982, 1983 (undocumented).

7) Inanda Newtown: Interviews with residents, late 1981 (Hardie and Hart, 1981a).

8) Inanda Newtown: Questionnaire survey, early 1983 (undocumented).

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